



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/782,896	02/13/2001	Dan Kikinis	ISURFTV129	3324

52940 7590 07/27/2006

TODD S. PARKHURST
HOLLAND & KNIGHT LLP
131 S. DEARBORN STREET
30TH FLOOR
CHICAGO, IL 60603

EXAMINER

RAMAN, USHA

ART UNIT

PAPER NUMBER

2623

DATE MAILED: 07/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/782,896

Applicant(s)

KIKINIS, DAN

Examiner

Usha Raman

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 December 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-8,10-14 and 16-22 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8,10-14 and 16-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 February 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

1. Applicant's arguments filed on May 15th, 2006 have been fully considered but they are not persuasive. Applicant further contends that, "Rosser inserts while applicant replaces" stating that "insertion is very different from replacement". While the exact scope of "replacement" in the claim language is not understood, the examiner best interprets this as a visual replacement of the 2-D image. In the case of Rosser, the enhanced 3-D advertisement comprising a portion of the 2-D image and the 3-D object now visually replace the screen containing 2-D image. As a result, the rejection is maintained.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "140" (used in disclosure page 12, line 2) and "340" (used in figure 4) have both been used to designate gridlines a-n of figure 4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

In page 5, line 9 and page 12, line 14, it appears that the "S-D highlighted rendering" is meant to indicate "3-D highlighted rendering".

In page 13, line 15, applicant is requested to fill in the fields of the copending application and the filing date described therein.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

5. Claims 1-2, 4-8, 10-14, 16-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Independent claims 1, 7, 13 and 19 recite the limitation, "replacing the original 2-D image". The meaning "replacing" within the context of the claim is further evident through applicant's arguments submitted on May 15th, 2006 stating that "inserting a 3-D highlighted rendering is different from replacement", wherein applicant insists that "Rosser inserts (the 3-D highlighted rendering) while applicant replaces. This is in direct contradiction to what is stated in

applicant's disclosure, which specifically states that, "object 320 maybe pushed with arrow 330 into flat geometric surface 301 so as to deform it" and, "still overlaid on the correct location is the image of the actual Coke bottle 310, so that the video image is preserved, and by overlaying shades and specular lighting the visual enhancement of the object can be heightened". See disclosure page 12, lines 12-13 and lines 18-20. The disclosure suggests that the 2-D image itself is never replaced, and that an object 320 is "pushed" into the screen to give a visual representation of a 3-D rendered object to the 2-D object.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-2, 4-5, 7-8, 10-11, 13-14, 16-17, and 19-22 are rejected under 35 U.S.C. 102(b) as being anticipated by Rosser (6,446,261).

In regards to claim 1 and 7, Rosser discloses a method for providing enhanced advertising of a 2-D video broadcast (see column 3, lines 22-25, column 5, lines 25-33, and column 10, lines 36-51), comprising the steps of:

Receiving the 2-D video broadcast from the head end (signal provided by LVIS, see column 7, lines 20-24), including a first advertisement (insertion is advertisements, see column 4, lines 49-54) having a 2-D image (insertion includes graphics, see column 6, lines 56-57);

Identifying ("stripping off"/extracting the graphic from signal, see column 7, lines 46-58) the 2-D image within the first advertisement, wherein the 2-D image is identified (i.e. extracted) solely based on its characteristics (identified based on encoded format/characteristics, see column 10, lines 15-20) and based exclusively at viewer's equipment (set top box 44)

Looking up (profile matcher 96 looks up) a matching 3D object (matching object is text, wherein the text may be a VRML/3D object; see column 10, lines 29-35 and column 11, lines 55-56) in an image library, wherein the library comprises one or more 3D objects; (stored insertions, column 7, lines 55-58) and

Using the matching insertion object to generate an enhanced first advertisement (i.e. warper unit warps the text-video and insertion video thereby creating the "warped insertion video", see column 10, lines 31-42); wherein the enhanced first advertisement has a 3-D highlighted rendering of the image (warped insertion video) of the 2-D image (image insertion 90), and thereby visually replacing the screen comprising only the original 2-D image; and further wherein the 3-D highlighted rendering of the image (the warped insertion video) comprises a portion of the original 2-D image (graphic insertion 90), and said 3-D object (VRML text). See column 10, lines 31-42.

Rosser further discloses that the enhanced VRML objects can be stored locally, at the set top box. Note column 4, lines 55-60 and column 7, lines 55-58. Therefore, upon receiving the indicia, the appropriate VRML object is retrieved

and inserted into the video. Such retrieval inherently requires a “look up table” for locating the VRML object stored locally in the set top box.

In further regards to claims 13 and 19, Rosser’s system embodies the methods disclosed in claim 1 in a computer readable medium (i.e. the set top box) having the necessary stored instructions in order to perform the recited steps.

In regards to claims 2, 8, 14, and 20, Rosser discloses that there are one or more images (indicia) within the first advertisement. See column 7, lines 5-14.

In regards to claims 4, 10, 16, and 22, Rosser discloses that the enhanced, 3-D rendered advertisement can be displayed on a television monitor, a computer monitor and such means. See column 7, lines 24-28.

In regards to claims 5, 11, and 17, Rosser teaches the method of warping images/text into the video, therefore also comprises the step of overlaying the additional data over the image in the 2-D advertisement. Note column 10, lines 31-40.

In regards to claim 21, Rosser discloses that the enhanced VRML objects can be stored locally, at the set top box. Note column 4, lines 55-60 and column 7, lines 55-58. Therefore, upon receiving the indicia, the appropriate VRML object is retrieved and inserted into the video. Such retrieval inherently requires a “look up table” for locating the VRML object stored locally in the set top box.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claims 6, 12 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosser (US Pat. 6,446,261).

In regards to claims 6, 12, and 18, Rosser does not teach the method of overlaying specular lighting and shading over the image.

Official notice is taken that it is well known to overlay specular lighting and shading on images to give them natural reflective and shading qualities, making them appear as a realistic 3-D image.

It would have been obvious to one of ordinary skill in the art to adjust the specular lighting and the shading of the image, in order to give it a more realistic, 3-D appearance.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Kamen et al. (US Pat. 6,421,067) discloses well known methods of generating 3-D rendered images, comprising a 2-D image (pixel array) and a computer model (a set of geometric surfaces such as polygon mesh) wherein the geometric surfaces is "pushed" into the 2-D image to create a 3-D rendering of the object. See column 8, lines 66-column 9, line 40.

11. THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Usha Raman whose telephone number is (571) 272-7380. The examiner can normally be reached on Mon-Fri: 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christopher Kelley can be reached on (571) 272-7331. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2623

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

UR



CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600